

§ 135.147 Dual controls required.

No person may operate an aircraft in operations requiring two pilots unless it is equipped with functioning dual controls. However, if the aircraft type certification operating limitations do not require two pilots, a throwover control wheel may be used in place of two control wheels.

§ 135.149 Equipment requirements: General.

No person may operate an aircraft unless it is equipped with—

- (a) A sensitive altimeter that is adjustable for barometric pressure;
- (b) Heating or deicing equipment for each carburetor or, for a pressure carburetor, an alternate air source;
- (c) For turbojet airplanes, in addition to two gyroscopic bank-and-pitch indicators (artificial horizons) for use at the pilot stations, a third indicator that is installed in accordance with the instrument requirements prescribed in § 121.305(j) of this chapter.
- (d) [Reserved]
- (e) For turbine powered aircraft, any other equipment as the Administrator may require.

[Doc. No. 16097, 43 FR 46783, Oct. 10, 1978, as amended at Amdt. 135-1, 44 FR 26737, May 7, 1979; Amdt. 135-34, 54 FR 43926, Oct. 27, 1989; Amdt. 135-38, 55 FR 43310, Oct. 26, 1990]

§ 135.150 Public address and crewmember interphone systems.

No person may operate an aircraft having a passenger seating configuration, excluding any pilot seat, of more than 19 unless it is equipped with—

- (a) A public address system which—
 - (1) Is capable of operation independent of the crewmember interphone system required by paragraph (b) of this section, except for handsets, headsets, microphones, selector switches, and signaling devices;
 - (2) Is approved in accordance with § 21.305 of this chapter;
 - (3) Is accessible for immediate use from each of two flight crewmember stations in the pilot compartment;
 - (4) For each required floor-level passenger emergency exit which has an adjacent flight attendant seat, has a microphone which is readily accessible to the seated flight attendant, except that one microphone may serve more

than one exit, provided the proximity of the exits allows unassisted verbal communication between seated flight attendants;

- (5) Is capable of operation within 10 seconds by a flight attendant at each of those stations in the passenger compartment from which its use is accessible;

- (6) Is audible at all passenger seats, lavatories, and flight attendant seats and work stations; and

- (7) For transport category airplanes manufactured on or after November 27, 1990, meets the requirements of § 25.1423 of this chapter.

- (b) A crewmember interphone system which—

- (1) Is capable of operation independent of the public address system required by paragraph (a) of this section, except for handsets, headsets, microphones, selector switches, and signaling devices;

- (2) Is approved in accordance with § 21.305 of this chapter;

- (3) Provides a means of two-way communication between the pilot compartment and—

- (i) Each passenger compartment; and
- (ii) Each galley located on other than the main passenger deck level;

- (4) Is accessible for immediate use from each of two flight crewmember stations in the pilot compartment;

- (5) Is accessible for use from at least one normal flight attendant station in each passenger compartment;

- (6) Is capable of operation within 10 seconds by a flight attendant at each of those stations in each passenger compartment from which its use is accessible; and

- (7) For large turbojet-powered airplanes—

- (i) Is accessible for use at enough flight attendant stations so that all floor-level emergency exits (or entryways to those exits in the case of exits located within galleys) in each passenger compartment are observable from one or more of those stations so equipped;

- (ii) Has an alerting system incorporating aural or visual signals for use by flight crewmembers to alert flight attendants and for use by flight attendants to alert flight crewmembers;